PORSFF
11.3.18.1 V10

Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product Name **MCC LUBRICITY 2115**

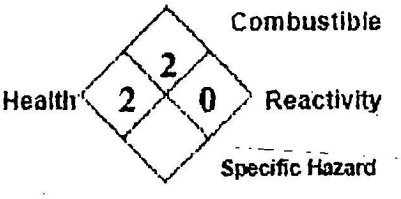
Supplier **MidContinental Chemical Company**
10875 Benson Drive Building 11 Suite 150
Overland Park, KS 66210
913-663-5055

Material Uses **Lubricity Additive.**

24 Hour Emergency Numbers **ChemTrec 800-424-9300 (U.S. 24 hour)**

National Fire Protection Association (U.S.A)

National Fire Protection Association (U.S.A.)



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Section 2. Composition and Information on Ingredients

Proprietary blend of Ester and Amide components in a heavy aromatic naphtha.

Name	CAS #	% by weight	Exposure Limits
Petroleum Distillates	64742-47-8	10-30	Not Available
Heavy aromatic naphtha	64742-94-5	5-10	Not available
1,2,4-Trimethylbenzene	95-63-6	1-5	Not available
Napthalene	91-20-3	1-5	**ACGIH (United States).** Skin TWA: 52 mg/m^3 8 hour(s). STEL: 79 mg/m^3 15 minute(s). TWA: 10 ppm 8 hour(s). STEL: 15 ppm 15 minute(s). **OSHA PEL 1989 (United States).** TWA: 10 ppm 8 hour(s). STEL: 15 ppm 15 minute(s). TWA: 50 mg/m^3 8 hour(s). STEL: 75 mg/m^3 15 minute(s).

While trimethylbenzene isomers do not have exposure limits, trimethylbenzene (mixed isomers) (CAS No. 25551-13-7) has TWA Value of 25 ppm for both ACGIH and OSHA (revoked limit).

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Section 3. Hazards Identification

Physical State and Appearance	State: Clear. Liquid., Color: Light Amber., Odor: Slight Aromatic hydrocarbon.
CERCLA Reportable Quantity	Naphthalene, 259 gal of this product.
Hazard Summary	WARNING. May cause chronic effects. Combustible liquid. At elevated temperatures, vapors can form an ignitable or explosive mixture with air. Can form explosive mixtures at temperatures at or above the flash point. Vapors can flow along surfaces to distant ignition sources and flash back. Static discharges can cause ignition or explosion when container is not bonded. May be irritating to eyes, skin and respiratory tract. May cause central nervous system (CNS) effects if inhaled.
Routes of Exposure	Skin (Contact), Eyes, Inhalation.
Potential Acute Health Effects	
Eyes	May cause eye irritation.
Skin	May be irritating to skin.
Inhalation	May cause central nervous system (CNS) effects if inhaled. May be irritating to lungs.
Ingestion	Not considered a likely route of exposure, however, may be aspirated into the lungs if swallowed. Can result in chemical pneumonitis (irritation) and pulmonary edema (accumulation of fluids) and hemorrhaging (bleeding).
Medical Conditions Aggravated by Exposure	Exposure to this product may aggravate medical conditions involving the following: blood system, kidneys, nervous system, liver, respiratory tract, skin/epithelium, eyes.

See Toxicological Information (section 11)

Additional Hazard Identification Remarks	Repeated or prolonged contact may cause dermatitis (inflammation) and defatting of the skin (dryness). May be harmful if ingested. This product may be aspirated into the lungs during swallowing or vomiting of swallowed material. Aspiration into the lungs may produce chemical pneumonitis, pulmonary edema, and hemorrhaging.

Section 4. First Aid Measures

Eye Contact	Flush eyes with plenty of water for 15 minutes, occasionally lifting upper and lower eyelids. Get medical attention immediately.
Skin Contact	Remove and launder or clean contaminated clothing and shoes. Wash with soap and water for at least 15 minutes or until no evidence of material remains. Get medical attention if irritation occurs.
Inhalation	Remove to fresh air. Oxygen may be administered if breathing is difficult. If not breathing, administer artificial respiration and seek medical attention. Get medical attention if symptoms appear.

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Ingestion	Get medical attention immediately. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never induce vomiting or give anything by mouth to a victim who is unconscious or having convulsions.
Notes to Physician	Not available.
Additional First Aid Remarks	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	Combustible liquid. At elevated temperatures, vapors can form an ignitable or explosive mixture with air. Can form explosive mixtures at temperatures at or above the flash point. Vapors can flow along surfaces to distant ignition sources and flash back. Static discharges can cause ignition or explosion when container is not bonded.
OSHA Flammability Class	IIIA
Autoignition temperature	Not available.
Flash Points	Closed cup: 60°C (>140°F). (PMCC)
Flammable Limits	L.E.L. Not available. U.E.L. Not available.
Products of Combustion	These products are carbon oxides (CO, CO2) nitrogen oxides (NO, NO2...).
Fire Hazards in Presence of Various Substances	Open Flames/Sparks/Static. Heat.
Fire Fighting Media And Instructions	In case of fire, use foam, dry chemicals, or CO2 fire extinguishers. Evacuate area and fight fire from a safe distance. Water spray may be used to keep fire-exposed containers cool. Keep water fun off out of sewers and public waterways. Note that combustible vapors may form an ignitable mixture with air. Vapors may travel considerable distances and flash back if ignited.
Protective Clothing (Fire)	Do not enter fire area without proper personal protective equipment, including NIOSH approved self-contained breathing apparatus.
Special Remarks on Fire Hazards	Not available.

Section 6. Accidental Release Measures

Spill	Put on appropriate personal protective equipment. Keep personnel removed and upwind of spill. Shut off all ignition sources; no flares, smoking, or flames in hazard area. Approach release from upwind. Shut off leak if it can be done safely. Contain spilled materials. Keep out of waterways. Dike large spills and use a non-sparking

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	or explosion-proof means to transfer material to an appropriate container for disposal. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container. Note that combustible vapors may form an ignitable mixture with air. Vapors may travel considerable distances from spill and flash back, if ignited. Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Other Statements	If RQ (Reportable Quantity) is exceeded, report to National Spill Response Office at 1-800-424-8802.
Additional Accidental Release Measures Remarks	Not available

7. Handling and Storage

Handling and Storage	Put on appropriate personal protective equipment. Avoid contact with eyes, skin, and clothing. Avoid breathing vapors or spray mists. Use only with adequate ventilation. Store in a dry, cool and well ventilated area. Keep away from heat, sparks and flame. Keep away from incompatibles. Keep container tightly closed and dry. To avoid fire or explosion, ground container equipment and personnel before handling product.
Additional Handling And Storage Remarks	Not available.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors or particles below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Personal Protective Equipment recommendations are based on anticipated known manufacturing and use conditions. These conditions are expected to result in only incidental exposure. A thorough review of the job tasks and conditions by a safety professional is recommended to determine the level of personal protective equipment appropriate for these job tasks and conditions.
Eyes	Chemical safety goggles.
Body	Wear long sleeves to prevent repeated or prolonged skin contact.

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Respiratory	Respirator use is not expected to be necessary under normal conditions of use. In poorly ventilated areas, emergency situations or if exposure levels are exceeded, use NIOSH approved full face respirator.
Hands	Chemical resistant gloves. Nitrile or Neoprene gloves.
Feet	Chemical resistant boots or overshoes.
Other Information	Not available.
Additional Exposure Control Remarks	Not available.

Section 9. Typical Physical and Chemical Properties

Physical State and Appearance	Clear. Liquid.
Odor	Slight Aromatic. Hydrocarbon.
Sulfur	<15 ppm
pH	7 - 9 (5% of product in 75% water 25% isopropanol)
Color	Light Amber.
Specific gravity	0.90-0.92 @ 16°C (60°F)
Density	7.60 – 7.70 lbs/gal @ 16°C (60°F)
Vapor Density	>(Air=1)
Vapor Pressure	1.37 – mmHg @ 20°C (68°F)
Evaporation Rate	Not Available or Applicable for Solids.
VOC	Not available.
Viscosity	70 -80 cps @ -1°C (30°F)
Pour Point	<-34°C (<-30°F)
Solubility (Water)	Insoluble
Boiling Point	Not available.
Physical Chemical	Not available.
Flash Point, deg F	> 140 deg (
Comments	

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	Not available.
Incompatibility with Various Substances	Oxidizing material.
Hazardous Decomposition Products	Not applicable.
Hazardous Polymerization	Hazardous polymerization is not expected to occur.
Special Stability & Reactivity Remarks	Not available.

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Section 11. Toxicological Information

Component Toxicological Information

Acute Animal Toxicity

Esters	Not Available
Amide	Not available.
Heavy aromatic naphtha	ORAL (LD50): Acute: >2000 mg/kg [Rat]. 3200 mg/kg [Rat]. DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].
1,2,4-Trimethylbenzene	ORAL (LD50): Acute: 5000 mg/kg [Rat]. VAPOR (LC50): Acute: 18000 mg/m^3 4 hour(s) [Rat].
Petroleum Distillates	Not Available
Naphthalene	ORAL (LD50): Acute: 490 mg/kg [Rat]. 2600 mg/kg [Rat]. 2400 mg/kg [Male rat]. DERMAL (LD50): Acute: >20000 mg/kg Rabbit.

Chronic Toxicity Data

1) Ester.
No information available

2)Amide
Eye contact may produce some irritation. Repeated or prolonged skin contact may cause irritation. Inhalation of vapors or mists may cause dizziness, nausea, or respiratory tract irritation. Aspiration into the lungs during ingestion or vomiting of swallowed material may product chemical pneumonitis, pulmonary edema, and hemorrhaging. There is no toxicity data on this chemical or irritation test data on this chemical. There is no data on its carcinogenicity, reproductive effects, or genetic effects.

3) Heavy Aromatic Naphtha
No information available.

4) 1,2,4-Trimethylbenzene
1,2,4-Trimethylbenzene, also known as pseudocumene, is a component of this product. Chronic pseudocumene exposure may provoke bronchospasm with cough

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and wheezing (Plunkett, 1976; ACGIH 1991; Battig et al, 1956). Respiratory distress was noted in experimental animals following sub acute inhalation exposure (Gage, 1970).Nervousness and anxiety were noted with chronic occupational exposure (Battig et al, 1956; ACGIH 1991).

At the time of this review, no studies were found on the potential adverse reproductive effects of pseudocumene in humans, but trimethylbenzenes (including pseudocumene) can cross the placental barrier (Clayton & Clayton, 1994; Doroty et al, 1976). In an experimental animal study, off spring born to pregnant rats exposed to pseudocumene were healthy at birth and grew normally (Cameron et al, 1938).

Blood effects such as anemia and delayed clotting time have been noticed in workers chronically exposed to a solvent containing trimethylbenzene. The blood effects, however, may have been due to a contaminant in the solvent such as benzene (a known blood toxin).

5) Petroleum Distillates - Animal studies have shown that prolonged inhalation exposures to high concentrations of some petroleum distillates have casued liver tumors in mice and kidney damage in male rats.

6) Naphthalene
This product contains naphthalene. A National Toxicology Program (NTP) report concluded there is clear evidence to support carcinogenicity of naphthalene in male and female rats. These observations were based on 2-year inhalation studies in which the test animals were exposed to 10, 30, and 60 ppm naphthalene. In male and female rats, exposure to naphthalene caused significant increases in the incidence of nonneoplastic lesions of the nose (NTP TR-500). The relevance of the rodent findings to humans is questionable.

Naphthalene has caused hemolytic anemia, jaundice, cataracts (Shopp et al, 1984), allergic reactions (Tsyrkunov & Yakovleva, 1985), possible neurotoxicity (Riala et al, 1984), and aplastic anemia (Harden & Baetjer, 1978) in humans. Increased lung aveolar adenomas were seen in mice exposed to 30 ppm naphthalene for 6hrs/day for 6 months (ACGIH, 1992)

Naphthalene crosses the placenta leading to methemoglobinemia (decreased ability for the blood to carry oxygen), and/or hemolytic anemia, conditions considered especially dangerous to the unborn (Reprotext). Liver and kidney damage has also been seen with exposure to naphthalene (Reprotext).

Peripheral lens opacities occurred in 8 of 21 workers exposed to high levels of naphthalene fumes or vapors for 5 years, but cataracts have not been reported in other occupational studies. (Hathaway et al, 1991).

The International Agency for Research on Cancer (IARC) evaluated naphthalene and concluded that there was sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence that it causes cancer in exposed humans. Accordingly, IARC classified naphthalene as a possible human carcinogen (Group 2B).

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Effects on the blood have been reported form chronic exposure to as little as 50 mg/m3 (Pap & Varga, 1987). Repeated exposure can damage bone marrow, causing low blood cell count and can damage the liver and kidneys (NJ Department of Health, Hazardous Substance Fact Sheet). Chronic xylene exposure (usually mixed with other solvents) has produced irreversible damage to the CNS (ILO, 1983). CNS effects may be exacerbated by ethanol abuse (Savolainen, 1980). Xylene may damage hearing or enhance sensitivity to noise in chronic occupational exposures (Morata et al, 1994), probably from neurotoxic mechanism. Tolerance to xylene can occur over the work week and disappear over the weekend (ACGIH, 1992).

Inhalation exposure has produced fetotoxicity and postnatal development toxicity in laboratory animals. (API, 1978, Kensington, MD, EPA/OTS Document No. 878210350 and Hess, U., et al, 1995, Neurotoxicology and Teratology 17: 341-349 and 1997, Neurotoxicology 18: 547-522)

Product Toxicological Information

Acute Animal Toxicity	Not available.
Target Organs	blood system, kidneys, nervous system, liver, respiratory tract, skin/epithelium, eyes.
Other Adverse Effects	Not available.

Section 12. Ecological Information

Exotoxicity	Not available.
BOD5 and COD	Not available.
Biodegradable/OECD	Not available.
Toxicity of the Products Of Biodegradation	Not available.
Special Remarks	Not available.

Section 13. Disposal Considerations

Responsibility for proper waste disposal rests with the generator of the waste. Dispose of any waste material in accordance with all applicable federal, state and local regulations. Note that these regulations may also apply to empty containers, liners and rinsate. Processing, use dilution or contamination of this product may cause its physical and chemical properties to change.

Additional Waste Remarks	Not available.

Section 14. Transportation Information

DOT Classification	COMBUSTIBLE LIQUID, N.O.S. (Contains: heavy aromatic naphtha, 1,2,4-Trimethylbenzene), 3, UN 1993,III

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DOT Reportable Quantity	Naphthalene, 259 gal of this product.
Marine Pollutant	Not applicable.
Additional DOT Information	Not available.
Emergency Response Guide Page Number	128

Section 15. Regulatory Information

HCS

Target organ effects. Combustible liquid. At elevated temperatures, vapors can form an ignitable or explosive mixture with air. Can form explosive mixtures at temperatures at or above the flash point. Vapors can flow along surfaces to distant ignition sources and flash back. Static discharges can cause ignition or explosion when container is not bonded. Irritant.

U.S. Federal Regulations

Environmental Regulations

Extremely Hazardous Substances: Not applicable to any components in this product.
SARA 302/304 Emergency Planning and Notification substances: Not applicable to any components in this product.
Hazardous Substances (CERCLA 302): Naphthalene, 259 gal of this product
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: fire; immediate health hazard; delayed health hazard;
Clean Water Act (CWA) 307 Priority Pollutants: Naphthalene
Clean Water Act (CWA) 311 Hazardous Substances: Naphthalene
Clean Air Act (CAA) 112 (r) Accidental Release Prevention Substances: Not applicable to any components in this product.

Threshold Planning Quantity (TPQ)

Not applicable.

TSCA Inventory Status

All components are included or are exempted from listing on the US Toxic Substance Control Act Inventory.

This product contains the following components that are subject to the reporting requirements of TSCA Section 12 (b) if exported from the United States: Xylene; Naphthalene.

State Regulations

State specific information is available upon request from MidContinental Chemical Company.

International Regulations

Canada

All components are compliant with or are exempted from listing on the Canadian Domestic Substance List.

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WHMIS (Canada)	B-3, D-2A, D-2B
European Union	All components are included or are exempted from Listing on the European Inventory of Existing Commercial Chemical Substances of the European List of Notified Chemical Substances. International inventory status information is available upon request from MidContinental Chemical Company for the following countries: Australia, China, Korea (TCCL), Philippines (RA6969), or Japan.
Harmonized Tariff Code	*Not available.*
Other Regulatory Information	No further regulatory information is available.

Section 16. Other Information

Other Special Considerations

Preparation Date, August 4, 2005 – New Product
Revised: 10/18/05

MidContinental Chemical Disclaimer

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